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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,423	03/30/2004	John J. Connors III	8627-452	4776
757	7590	11/17/2006		
BRINKS HOFFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			EXAMINER CHANG, ROSIE YUH LOO	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/813,423

Applicant(s)

CONNORS ET AL.

Examiner

ROSIE YL CHANG

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5 are rejected under U.S.C. 102 (b) as being anticipated by Engelson (EP 0,769,306).

Engelson ('306) teaches a method for making a wire guide, therein providing a mandrel having a proximal portion and a distal portion (col. 5, line 10-16). The said wire guide has a permanent, spray-applied first coating of polytetrafluoroethylene, low co-efficient of friction polymer surface, on the proximal portion and the more-distal portion adjacent to the proximal portion of the mandrel. In addition, the said distal portion of the mandrel can be connected to a radio-opaque coil (col. 5, line 19-20).

Engelson ('306) further teaches a procedure for pretreating the more-distal portion of the guide wire prior to receiving a subsequent coating, e.g. the third coating, of a lubricious, biocompatible and hydrophilic polymer is via the use of plasma stream to deposit a hydrocarbon or fluorocarbon layer on the mandrel (col. 10, line 10-15). The procedure is as follows: the guide wire mandrel is placed in a plasma chamber and cleaned with oxygen plasma etch, e.g., to remove the first coating from the distal portion

of the mandrel, the guide wire mandrel is then exposed to a hydrocarbon plasma to deposit a plasma-polymerized tie layer, e.g. the second coating layer, thereon.

Engelson ('306) teaches that the suitable material for such tie layer (col. 9, line 28-46) may be strong and flexible polymer such as polyurethane, which provides a sub-structure to the third layer coating.

The lubricious hydrophilic third coating layer is applied over the said second coating layer and the suitable material for third layer is polyvinylpyrrolidone (col.8, line 44), wherein the third coating layer comprises a surface that allows for easy maneuverability of the wire guide (col.4, line 55-56).

As for claims 2 and 4:

Engelson ('306) teaches that the lubricious hydrophilic third coating is preferably produced using generally simultaneous solvent removal and cross-linking operation (col.8, line 49-51). The solvent removal procedure takes place in a heating chamber of the temperature of 750-1000C (col. 9, line 3-4). The Surface of the third coating is maintain up to the glass transition temperature (T_g) of the underlying layers.

Therefore, the lubricious hydrophilic surface coating is polished and allows for easy maneuverability of the wire guide through a vascular anatomy (col. 4, line 55-58).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Engelson ('306) in view of Jafari et al. (US 6,652,472).

Engelson ('306) teaches that which is disclosed in above. The distal portion of the mandrel in the teaching of Engelson ('306) is tapered (col. 5, line 41), however, Engelson ('306) is silent concerning forming the tapered distal portion in the same time of removing the first coating layer by a etching process thereon.

Jafari et al. ('472) teach a method for making a wire guide, therein providing a mandrel having a proximal portion and distal portion (col. 2, line 29-37). The said mandrel is coated with a lubricious coating such as Teflon, which extends the length of the proximal portion. The distal section has tapered flexible segments (col.3, line 59), which is also provided with a different lubricous coating (col. 4, line 12). Engelson ('306) teaches a centerless grinder may be used to grind the tapers or other means such as chemical means, e.g. etching, can be used to form the tapered segments in the distal portion of said mandrel (col. 5, line 32-39). Since both Engelson ('306) and Jafari et al. ('472) teach a tapered segment in the distal portion of the guide wire, Jafaro et al ('472) provide the success of forming the tapered segment by chemical etching or mechanical grinding, therefore it would have been obvious to one of ordinary skill in the art to use the teaching of Jafari et al. ('472) in the method of Engelson ('306) to remove the first coating on the distal portion in the same time to form the tapered segement in distal

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portion of said guide wire. One would be able to combine the processes of cleaning and tapering the distal portion in one and to create a flexible and maneuverable guide wire tip cost-effectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROSIE YL CHANG whose telephone number is 571-272-6466. The examiner can normally be reached on MONDAY TO FRIDAY 7:00AM TO 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY MEEKS can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


KEITH HENDRICKS
PRIMARY EXAMINER